

Title (en)

Vibration motor for obtaining a starting torque with a small current.

Title (de)

Schwingmotor zum Erzeugen eines Anlaufmomentes mit niedrigem Strom.

Title (fr)

Moteur vibreur pour obtenir un couple de démarrage à faible courant.

Publication

EP 0667672 A1 19950816 (EN)

Application

EP 95101702 A 19950208

Priority

JP 3643794 A 19940209

Abstract (en)

The present invention is provided with a motor(2) having a rotary shaft(3). A weight(9) is fixed to a motor(2) through guide pins(6) formed to the rotary shaft(3). Each of springs(8) has one end connected to the rotary shaft(3) and the other end connected to the weight(9). The guide pins(3) guide the vertical movement of the weight(9) with respect to the rotary shaft(3). Holes(10) are formed in the weight(9) and the guide pins(6) are pierced therethrough. A hook(7) is formed to a tip of each guide pin(6) to prevent the weight(9) from coming off the guide pins(6) when the weight(9) is rotated. With the above-described arrangement, in the vibration motor(1) according to the present invention, the eccentric quantity of the weight(9) with respect to the rotary shaft(3) becomes small by the springs(8) when the rotation of the weight(9) is started. The starting torque of the motor(2) can be, therefore, small. With the start of the rotation of the weight(9), the eccentric quantity of the weight(9) with respect to the rotary shaft(3) becomes large against the tension of the springs(8) by the centrifugal force of the rotation, and the vibration motor(1) can obtain a sufficient quantity of vibration. <IMAGE>

IPC 1-7

H02K 7/06; B06B 1/16

IPC 8 full level

H02K 7/075 (2006.01); **H02K 7/06** (2006.01); **H02K 7/065** (2006.01)

CPC (source: EP KR US)

H02K 7/061 (2013.01 - EP US); **H02K 33/02** (2013.01 - KR); **H02N 2/08** (2013.01 - KR); **Y10T 74/18552** (2015.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

CH DE DK FR GB LI SE

DOCDB simple family (publication)

EP 0667672 A1 19950816; CN 1112303 A 19951122; JP 2814908 B2 19981027; JP H07227061 A 19950822; KR 100206076 B1 19990701; KR 950035027 A 19951230; TW 339483 B 19980901; US 5909074 A 19990601

DOCDB simple family (application)

EP 95101702 A 19950208; CN 95102941 A 19950209; JP 3643794 A 19940209; KR 19950002368 A 19950209; TW 84101082 A 19950209; US 99104097 A 19971216